

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE SPECIFICATION  
STREAMBANK AND SHORLINE PROTECTION – WIRE BOUND  
RIPRAP  
CODE 580-W**

**1. MATERIALS**

- a. Woven Wire – Shall be galvanized and of the specified gage and style shown on the drawings and shall conform to the requirements of Federal Specification RR-F-221.
- b. Tie Wire – Shall be 12-gauge galvanized steel wire and shall conform to the requirements of Federal Specification RR-F-221.
- c. Rock – Shall be hard and durable and be approved by the engineer prior to placing. The rock shall be a minimum of 6-inch diameter and a maximum of 12-inch diameter.
- d. Bedding – Shall be uniformly graded gravel from 2-inch to ¼-inch.
- e. Steel Stake – Shall be of the type shown on the drawings.

**2. SUBGRADE PREPARATION**

The sub-grade surface on which the riprap or bedding course is to be placed shall be cut or filled to the lines and grades shown on the drawings and compacted to a density equal to the undisturbed subgrade. If fill material is required, it shall be a select material approved by the engineer.

**3. FILTER LAYER OR BEDDING**

The gradation shall be as shown on the drawings. When the drawings specify filter layers or bedding beneath riprap, the filter or bedding material shall be spread uniformly on the prepared subgrade surfaces to the depth specified. Compaction of filter layers or bedding material will not be required, but the surface of such layers shall be finished reasonably free of mounds, dips, or windrows.

**4. PLACEMENT OF RIPRAP**

The rock shall be placed by hand or other methods approved by the engineer on the surfaces and to the depths specified. It shall be securely bedded with the larger rocks firmly in contact one to another. Spaces between the larger rocks shall be filled with small rocks and spalls. Smaller rocks shall not be grouped as a substitute for larger rock. Flat slab rock shall be laid on edge.

**5. PLACEMENT OF WIRE**

- a. The woven wire shall be placed on the bedding, then rock placed thereon, and the outer cage of wire placed over the rock. The lower cage of wire shall be tied to the upper edge by inter-connecting ties on a two-foot spacing grid pattern. Woven wire splices will overlap one-foot and be tied on 6-inch spacings, except selvaged edges will not require overlap. Use a loop with three full twists for all ties. The finished job shall be a wire-bound riprap where the rock is fully enclosed by woven wire including the footing, ends, and sides.
- b. Steel anchors shall be of the length and shape as shown on the drawings and will be driven into the riprap on five-foot centers in both directions.

**6. MEASUREMENT**

The measurement of the wire-bound riprap, including bedding, will be made on the basis of the actual volume of rock and bedding with the neat lines of the structure as indicated on the drawings and will be computed to the nearest cubic yard.